

# Rediscovery of *Puccinellia* stapfiana R. R. Stewart - An Endemic Grass from Ladakh, Jammu & Kashmir

#### **Abstract**

Puccinellia stapfiana R.R. Stewart, an endemic grass closely allied to *P. himalaica* Tzvelev and *P. tenuiflora* (Griseb.) Scribn. & Merr., has been rediscovered from Ladakh in Jammu & Kashmir after a gap of 135 years. This species was first collected by T. Thomson in 1847. It is described and illustrated.

Keywords: Puccinellia stapfiana, rediscovery, Jammu & Kashmir

#### Introduction

A cursory examination of specimens of the genus *Puccinellia* Parl., housed in the herbarium of the Botanical Survey of India, Dehradun (BSD) helped the authors to come across an interesting grass specimen which, after critical study and perusal of relevant literature (Bor, 1960; Stewart, 1972; Cope, 1982; Murti, 2001), proved to be *P. stapfiana* R. R. Stewart, a species so far known by only two collections made by T. Thomson in 1847 from the Ladakh region in Jammu & Kashmir. It is described and illustrated in this communication.

Puccinellia stapfiana R. R. Stewart in Brittonia 5: 418. 1945; Bor, Grasses Burma Ceylon India 563. 1960; Cope in Nasir & Ali, Fl. Pakistan 143: 431. 1982; Murti, Fl. Cold Des. W. Himal. 1: 394. 2001. *Glyceria poaeoides* Stapf in Hook. f., Fl. Brit. India 7: 348. 1896, non *Puccinellia poaeoides* Keng.

Fig. 1a-g.

Tufted perennials; culms 30-45 cm high, erect or geniculately ascending. Leaf blades folded, 5-10 cm long, 1-2.5 mm wide, slightly glaucous, scaberulous above. Panicles linear or lanceolate, 6-11 cm long, branches bare in the lower part, scabrid, ascending. Spikelets 5-6 mm long, 2-4 flowered, pallid or tinged with purple; glumes elliptic, blunt, minutely serrulate-ciliate on the margins, the lower 1.5-2.2 mm long, 1-1 nerved, the upper 1.5-2.2 mm long, 1-1 nerved, the upper 1.5-2.2 mm long, 1-1 nerved, broadly elliptic 1-1 oblong, obtuse, serrulate-ciliate on the margins towards the top, otherwise glabrous, mid-nerve reaching the tip; palea keels scabrid above, smooth below; anthers 1-1 mm long.

Flowering & Fruiting: August - September.

Habitat: Moist, sandy and saline places.

Distribution: INDIA, Jammu & Kashmir: Ladakh. Endemic and rare.

Specimens Examined: INDIA, Jammu & Kashmir, Ladakh, Chushul village, 21.8.1982, P. K. Hajra 74222 (BSD).

*P. stapfiana* is closely allied to *P. himalaica* and *P. tenuiflora*. But it differs from *P. himalaica* in having smaller lemmas (1.5-2.1 mm long) and smaller anthers (0.5-1.5 mm long) and from *P. tenuiflora* in having smaller lemma 1.52-2 mm long, smaller anthers 0.9-1.5 mm and taller habit (up to 70 cm).

*P. stapfiana* is known only from the Ladakh region of Jammu & Kashmir (Cope, 1982; Murti, 2001). While Murti (2001) recorded it on the basis of published literature (Bor, 1960; Stewart, 1972; Cope, 1982) it was recorded from Pakistan

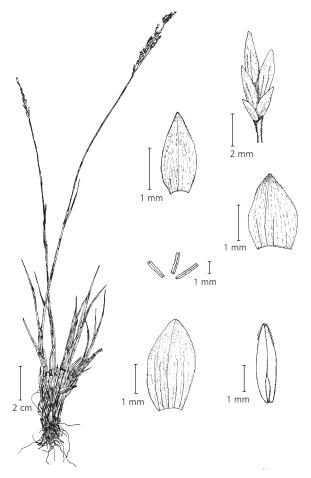


Figure 1. Puccinellia stapfiana R.R. Stewart. a. Habit, b. A spikelet, c. Lower glume, d. Upper glume, e. Lemma, f. Palea, g. Anthers.

only on the basis of the type specimens [T. Thomson 32208 (holotype) and 32309 ] (Stewart, 1972; Cope, 1982). These two specimens housed at K were studied by Dr Leos Klimes, Czech Academy of Science. Dr Klimes, while upon a visit to BSD under an exchange programme, confirmed the identity of our specimens. Bor in 'Flora Iranica' (1970) mentioned the occurrence of this species in Pakistan on the basis of two sheets [Quetta, Norris 49 (K, RAW); Baluchistan, Lace 3808 (K)] but Cope (1982) in 'Flora of W. Pakistan' mentioned *P. stapfiana* as endemic to Kashmir. According to him (Cope, pers. comm.) both Norris 49 (K, RAW) and Lace 3808 (K) belong to *P. gigantea*, the most widespread species of the genus in Asia from Caucasus eastwards.

## Acknowledgements

Authors are thankful to the Director, Botanical Survey of India, Kolkata for facilities and to Dr. Leos Klimes, Czech Academy of Science, Czech Republic for valuable suggestions. One of us (AC) is also thankful to the Ministry of Environment and Forests, New Delhi for financial assistance.

### Literature Cited

Bor, N. L. 1960. The Grasses of Burma, Ceylon, India and Pakistan (excluding Bambuseae). Oxford.

Bor, N. L. 1970. Gramineae. In: Rechinger, K.H. (Ed.) Flora Iranica. Akademische Druck-u. Verlagsanstalt, Graz-Austria. 70: 68.

Cope, T. A. 1982. Flora of Pakistan. No. 143. Poaceae. Islamabad.

**Murti, S. K. 2001.** *Flora of Cold Deserts of Western Himalaya.* Vol. I. (*Monocotyledons*). Botanical Survey of India. Kolkata.

**Stewart**, R. R. **1972**. *An Annotated Catalogue of the Vascular Plants of West Pakistan and Kashmir*. Karachi.

Received 24.01.2005 Revised and accepted 6.9.2005

# Amit Chauhan, D. K. Singh<sup>1</sup> and J. S. Dhakre<sup>2</sup>

CIMAP Resource Centre, Purara, Gagrigole P.O., Bageshwar 263 688, Uttaranchal, India. <sup>1</sup>Botanical Survey of India, 3<sup>rd</sup> MSO Building, Block F, CGO Complex, DF Block, Salt Lake Sector I, Kolkata 700 064, India. email: singh\_drdk@rediffmail.com (corresponding author) <sup>2</sup>18, Moti Bagh, Dayal Bagh, Agra 282 005, Uttar Pradesh, India